To facilitate synchronizing and the transfer of load from one machine to another, the governor is provided with a hand-operated synchronizing arrangement, by means of which the speed can be varied 5 per cent above or below normal speed when running.

Steam is admitted to the turbine through a number of fixed nozzles usually bolted to the controlling valve chest. The nozzles are divided into groups, and the admission of steam to the groups of

SERVO MOTOR

nozzles is controlled

ORDER IN WHICH VALVES OPEN

No 6 NoS No A No 3

OIL RESERVOIR I

pjg_{4 3}-t—Governor and Nozzle Control Gear for Curtis Turbine

by a series of poppet valves. The spindle of each valve extends through a stuffing box, and is secured to a lever, one end of which is pivoted to a link attached to the valve chest, whilst the other end is connected to a cam mechanism, by means of which the lever is operated, thus causing the controlling valve to open or shut as required.

Turbines of over 2000-h.p. capacity are provided with a turbine-driven auxiliary pump to flood the bearings when running the turbine up and shutting down, and to come into operation in case of failure of the main oil supply. In "the case of smaller turbines, each bearing is provided with lubricating rings which take the place of the auxiliary oil-pump, and an ample oil-well is arranged to feed the rings.